

DETAILED ACTION

Allowable Subject Matter

1. Claims 4-12 allowed.
2. The following is an examiner's statement of reasons for allowance:
3. As claim 4, the prior arts in the record fail to disclose a method for at least one of the channels, when a next update of the allocated transmission bit rate can be implemented, following an implementation delay, before a decode time of a next picture, a maximum limit is set on the allocated transmission bit rate at a current time (CT) in proportion to a fullness of the modeled decoder buffer at a time (CT+delay), and in inverse proportion to a time period between (CT+delay) and the decode time within a structure of the claim.
4. As claim 5, the prior arts in the record fail to disclose a method for at least one of the channels, when a next update of the allocated transmission bit rate can not be implemented, following an implementation delay, before a decode time of a next picture, a maximum limit is set on the allocated transmission bit rate at a current time (CT) in proportion to a fullness of the modeled decoder buffer at a time (CT+delay), and in inverse proportion to a time period between (CT+delay) and a decode time of a picture that follows said next picture within a structure of the claim.
5. As claim 6, the prior arts in the record fail to disclose a method for at least one of the channels, when a next update of the allocated transmission bit rate can be implemented, following an implementation delay, before a decode time of the current picture, a minimum limit is set on the allocated transmission bit rate at a current time (CT) in proportion to a number of

remaining bits of the current picture to transmit at a time (CT+delay), and in inverse proportion to a time period between (CT+delay) and the decode time within a structure of the claim.

6. As claim 7, the prior arts in the record fail to disclose a method for at least one of the channels, determining whether a current allocated transmission bit rate is sufficient to transmit a number of remaining bits of the current picture in a time period between a current time and a decode time of the current picture, and, if so, maintaining the current allocated transmission bit rate in a next update cycle thereof within a structure of the claim.

7. As claim 7, the prior arts in the record fail to disclose a method for at least one of the channels, forcing the allocated transmission bit rate to a maximum value in a next update cycle thereof when a current allocated transmission bit rate is not sufficient to transmit a number of remaining bits of the current picture in a time period between a current time and a decode time of the current picture within a structure of the claim.

8. As claim 8, the prior arts in the record fail to disclose a method for at least one of the channels, forcing the allocated transmission bit rate to a maximum value in a next update cycle thereof when a current allocated transmission bit rate is not sufficient to transmit a number of remaining bits of the current picture in a time period between a current time and a decode time of the current picture within a structure of the claim.

9. As claim 9, the prior arts in the record fail to disclose a method for at least one of the channels, when a next update of the allocated transmission bit rate can be implemented, following an implementation delay, before a decode time of a next picture, a maximum limit is set on the allocated transmission bit rate at a current time to avoid an overflow of the modeled decoder buffer at the decode time within a structure of the claim.

10. As claim 10, the prior arts in the record fail to disclose a method for at least one of the channels, when a next update of the allocated transmission bit rate can not be implemented, following an implementation delay, before a decode time of a next picture, a maximum limit is set on the allocated transmission bit rate at a current time to avoid an overflow of the modeled decoder buffer at a decode time of a picture that follows said next picture within a structure of the claim.

11. As claim 11, the prior arts in the record fail to disclose a method for at least one of the channels, when a next update of the allocated transmission bit rate can be implemented, following an implementation delay, before a decode time of the current picture, a minimum limit is set on the allocated transmission bit rate at a current time such that the current picture is completely transmitted before the decode time within a structure of the claim.

12. As claim 12, the prior arts in the record fail to disclose a method for at least one of the channels, when a next update of the allocated transmission bit rate can not be implemented, following an implementation delay, before a decode time of the current picture, a minimum limit on the allocated transmission bit rate at a current time is set to a maximum value to mitigate a potential underflow of the modeled decoder buffer within a structure of the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN H.D NGUYEN whose telephone number is (571)272-3159. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven H.D Nguyen/
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